



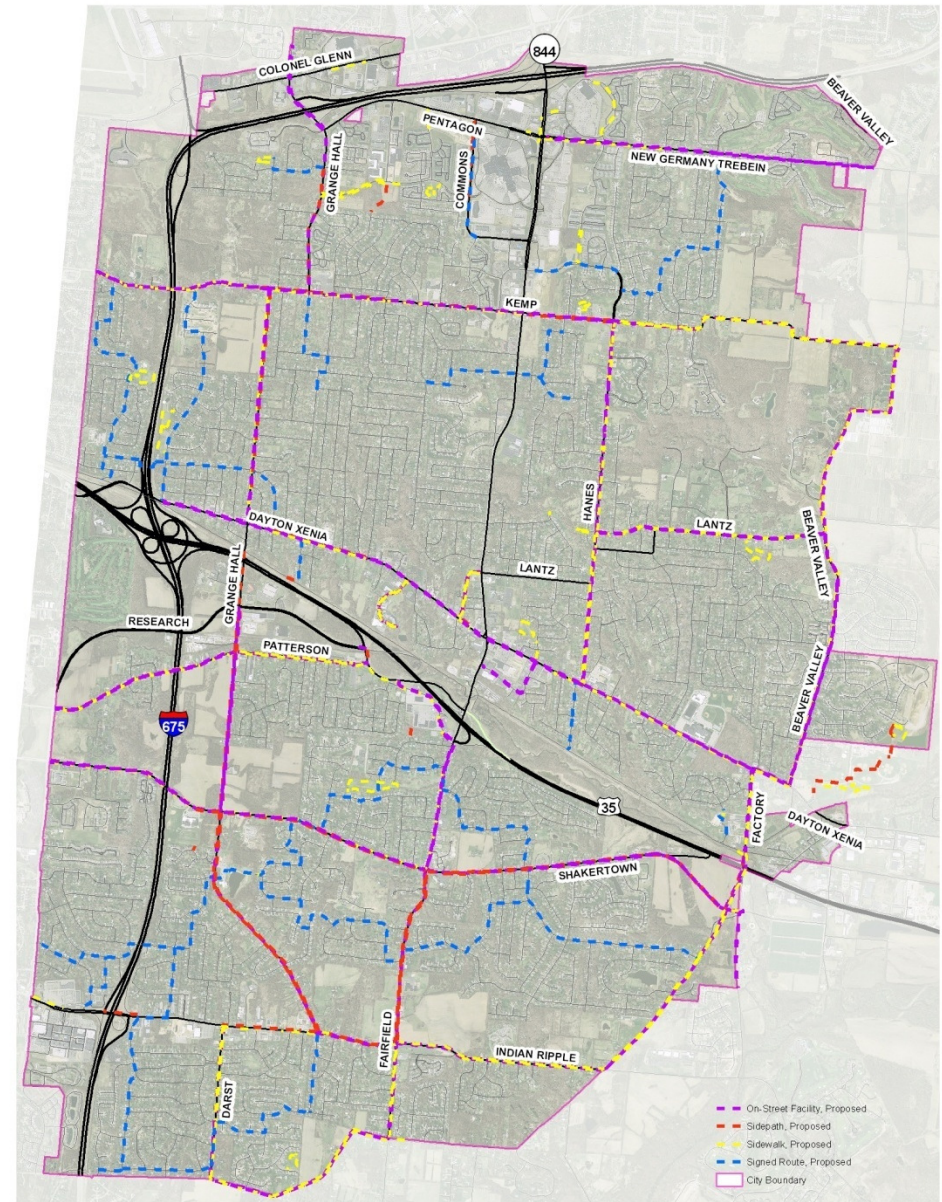
**Future Needs:**

**Non-Motorized**  
**Transportation**

# Future Non-Motorized Transportation Facilities

A complete and accessible non-motorized system can provide numerous benefits to the City of Beavercreek. A thoroughly planned and implemented non-motorized system can improve the general health of Beavercreek residents, can benefit the City economically, can increase accessibility to physically and financially disadvantaged individuals, can promote a cleaner environment and can act as a catalyst to bring the community together in a social setting. Over the last several years, the City of Beavercreek has continued to develop a non-motorized transportation system. In the past, the focus has been on completing off-street, separate pedestrian and bicyclist facilities, such as the multi-use paths along Dayton-Xenia Rd., Grange Hall Rd, Pentagon Blvd and the Creekside Trail. However, this is only one piece of a complete system. To complete the system and accommodate both recreational and commuter users, the plan needs to include both on-street and off-street facilities. While the plan to the right does show the use of on-street facilities in main roadways, no specific type of facility has been shown, as this should be decided on a case-by-case basis. It should be noted the proposed plan to the right is not intended to show immediate requirements for construction of the non-motorized facilities, but is intended to show which non-motorized facilities should be included in any major future roadway improvement project as determined by the City Engineer. If it becomes apparent, while engineering future projects that such facilities are a practical impossibility, City Council will always have the authority to deviate from the proposed plan.

Future development projects located adjacent to projects shown on the map to the right will be required to include the construction of the portion of roadway and non-motorized transportation facility that fronts their projects, unless otherwise exempted by City Council (based on the recommendation of the City Engineer) from doing so.



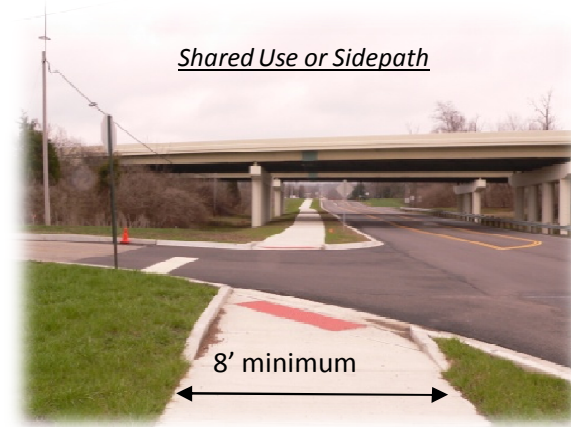
*For detailed corridor information, please see Appendix A*



# Definitions

For the purpose of the Thoroughfare Plan, the following definitions shall apply unless the context clearly indicates or requires a different meaning. In case of any difference of meaning or implication between the text of this chapter and any caption or illustration, the text shall control.

***SIDEPATH or SHARED USE PATH.*** A facility separated from motor vehicle traffic by an open space or barrier, either within the roadway right-of-way or within an independent right-of-way. These are typically used by pedestrians, joggers, skaters and bicyclists. Typically these facilities are constructed of a permanent and continuous hard surface of one or more of following: Portland cement concrete, bituminous/asphalt concrete, or a solid brick paver surface and are 8 feet or more in width.



***SIDEWALK.*** A facility separated from motor vehicle traffic by an open space or barrier, either within the roadway right-of-way or within an independent right-of-way. These are typically used by pedestrians, joggers, skaters and bicyclists. Typically they are constructed of a permanent and continuous hard surface constructed of one or more of the following: Portland cement concrete, bituminous/asphalt concrete, or a solid brick paver surface, and are less than 8 feet in width.

## Definitions (cont.)

**ON-STREET FACILITIES.** Facilities that are not physically separated from the vehicle travel lane, which are primarily designated for the use of commuter bicycle travel. Numerous forms of on-street facilities existing including:

**WIDENED TRAVEL LANES.** Moderate capacity Collector street travel lanes that should be a minimum 14 feet wide. This definition does not apply to higher capacity road classifications.

**BICYCLE BOULEVARDS.** The operation of a local street is modified to function as a through street for bicyclist while maintaining local access for automobiles. Traffic calming devices control traffic speeds and discourage through trips by automobiles. Traffic controls limit conflict between automobiles and bicyclists and give priority to through bicycle movement.

**BIKE LANES or BICYCLE LANES.** A portion of the roadway, which has been designated by striping, signing and/or pavement markings for the preferential or exclusive use of bicyclists in one-way travel. The minimum width for a bicycle lane is five feet, separated from motor vehicle traffic by a solid, six to eight-inch painted white line.

**SHOULDER BIKEWAYS.** A paved shoulder that provides a suitable area for bicycling, reducing conflict with faster moving motor vehicle traffic.

**SHARED LANE MARKING or SHARROWS.** Lane markings placed in the travel lane at specified intervals, to indicate that a bicyclist may use the full lane. Per federal guidelines, the maximum posted speed limit of roadways utilizing **SHARROWS** is 35 MPH.

**SIGNED NEIGHBORHOOD CONNECTORS or SHARED ROADWAY.** Roadways designed as preferred bikeway paths on the Non-Motorized Transportation map where bicyclist and motorist ride in the same travel lanes, while signage alerts motorist to the increased possibility of bicycle traffic.

Signed Neighborhood Connector



"Sharrows"

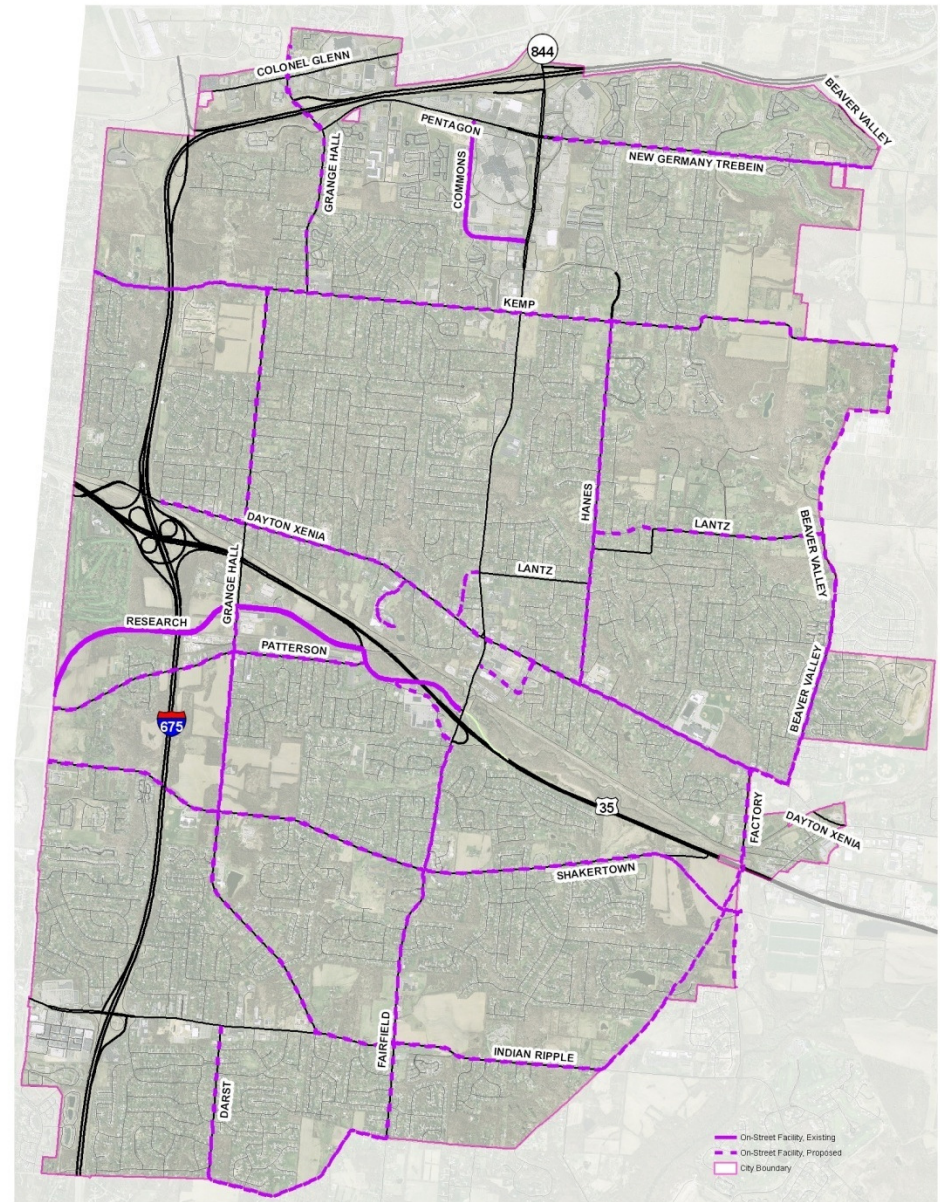




# On-Street Facilities



The 5.49 miles of widened shoulders on Research Boulevard and the 1.98 miles of sharrows on Commons Boulevard represents the extent of the existing on-street facilities in the City. The proposed plan shows an additional 76.74 miles of on-street facilities to be included in construction projects on most of the arterials and commercial/residential collectors in the City. The proposed on-street facilities are intended to connect the signed neighborhood connectors with each other, as well as provide an express route to the Creekside Trail for commuter bicyclists, who may be reluctant to use segregated shared use paths because of potential conflicts with joggers and recreational bicyclist.





# Sidepaths

The 17.44 miles of shared use paths along Pentagon Blvd., Commons Blvd., Dayton-Xenia Rd., Shakertown Rd., Indian Ripple Rd., North Fairfield Rd. and on Creekside Trail are a significant piece of a complete non-motorized transportation system in the City.

The proposed plan shows an additional 19.87 miles of sidepaths to be included in future construction projects on most of the arterials and commercial/residential collectors in the City highlighted in red on the map to the right. 2.59 miles of sidepath, highlighted in green on the map to the right have already been funded and are in early stages of development. As with the on-street facilities, the proposed shared use paths are intended to connect the signed neighborhood connectors with each other, as well as provide an express route to the Creekside Trail. However, in contrast with on-street facilities, sidepaths are intended more for pedestrians and recreational bicyclists, and can be used by commuter bicyclists, who are reluctant to ride in traffic with motor vehicles.





# Signed Neighborhood Connectors



Signed neighborhood connectors represent the “preferred way” for bicyclists and pedestrians to utilize existing roadways, on sidewalks or in the absence of sidewalks along roadways, to transverse from one part of the City to another, or from one shared use path/on-street facility to another.

Signed Neighborhood Connector A and E, a combined 8.37 miles, are the two existing routes. An additional 22.91 miles are planned, as shown in the map to the right. Appendix B further details a proposal to name each of the signed neighborhood connectors.

